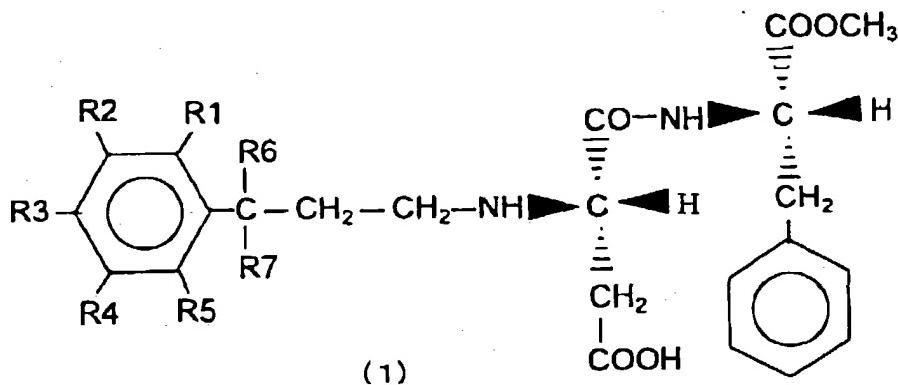


WHAT IS CLAIMED IS

1. A composition, comprising an aspartyl dipeptide ester compound represented by formula (1) or a salt thereof; and another high intensity sweetener in an amount sufficient to improve the quality of the sweetness of said aspartyl dipeptide ester compound:



wherein R₁, R₂, R₃, R₄ and R₅ are independently selected from the group consisting of a hydrogen atom, a hydroxyl group, a methoxy group and a methyl group, and R₆ and R₇ are independently a hydrogen atom or a methyl group,
10 and when R₆ and R₇ are different substituents, the carbon atom to which these substituents are linked is in the (R), (S) or (RS) configuration.

2. The composition as defined in claim 1, wherein the sweetness intensity of
15 said aspartyl dipeptide ester compound is more than 4,000 times that of sucrose.
3. The composition as defined in claim 2, wherein R₃ is a hydroxyl group or a methoxy group; and R₄ and R₅ are hydrogen atoms.

4. The composition as defined in claim 3, wherein R₁ is a hydroxyl group.

5. The composition as defined in claim 3, wherein R₁ is a hydrogen atom.

5 6. The composition as defined in claim 4, wherein R₂, R₆ and R₇ are
hydrogen atoms.

7. The composition as defined in claim 5, wherein R₂ is a hydrogen atom, a
hydroxyl group or a methyl group.

10

8. The composition as defined in claim 1, wherein the aspartyl dipeptide
ester compound is selected from the group consisting of: (1) a compound wherein
R₁, R₄, R₅, R₆, and R₇ are hydrogen, R₂ is OH, R₃ is OCH₃; (2) a compound
wherein R₁, R₂, R₄, R₅, R₆, and R₇ are hydrogen, , R₃ is OCH₃; (3) a compound
15 wherein R₁, R₄, and R₅, are hydrogen, R₂ is OH, R₃ is OCH₃, R₆ and R₇ are CH₃;
(4) a compound wherein R₁, R₄, and R₅ are hydrogen, R₂ is CH₃, R₃ is OH, R₆ and
R₇ are CH₃; (5) a compound wherein R₁, R₂, R₄, and R₅ are hydrogen, R₃ is a
15 OCH₃, R₆ and R₇ is CH₃; (6) a compound wherein R₁, R₂, R₄, and R₅ are hydrogen,
R₃ is OH, R₆ and R₇ is CH₃; (7) a compound wherein R₁ is OH, R₂, R₄, R₅, R₆ and
20 R₇ are hydrogen, R₃ is a OCH₃; (8) a compound wherein R₁, R₄, R₅, R₆, and R₇ are
hydrogen, R₂ is a CH₃, R₃ is OH; and (9) a compound wherein R₁ and R₃ are OH,
R₂, R₄, R₅, R₆ and R₇ are hydrogen.

9. The composition as defined in claim 8, wherein the aspartyl dipeptide
25 ester compound is a compound wherein R₁, R₂, R₄, R₅, R₆, and R₇ are hydrogen

and said another high intensity sweetener is Aspartame, wherein the ratio of said Aspartame to the total amount of said compound is from 25 to 99.7% by weight.

10. The composition as defined in claim 1, wherein said another high
5 intensity sweetener is at least one sweetener selected from the group consisting of Aspartame, Acesulfame K, Saccharine, a salt of Saccharine, Sodium cyclamate, sucralose, disodium glycyrrhizinate, Alitame, Glycyrrhizin, a Stevioside compound, and Thaumatin.

10 11. The composition as defined in claim 1, wherein said another high
intensity sweetener is Aspartame.

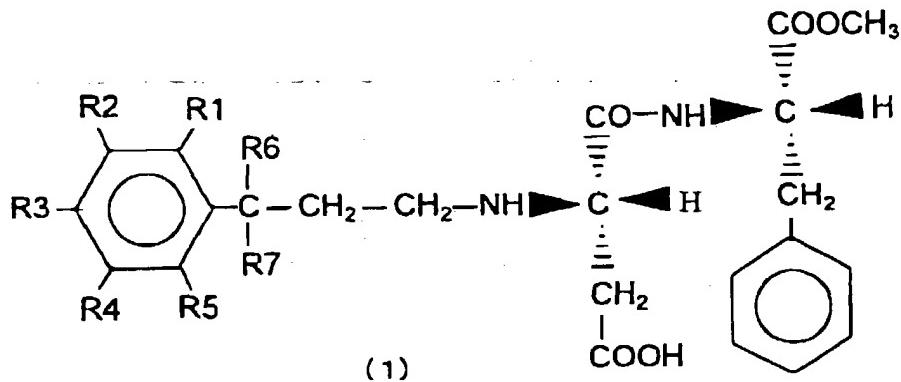
12. The composition as defined in claim 11, wherein said Aspartame is in an
amount of from 5 to 90% by sweetness intensity, relative to a total amount of the
15 aspartyl dipeptide ester derivative.

13. The composition as defined in claim 1, wherein said aspartyl dipeptide
ester is in an amount of from 1 to 99.9% by weight.

20 14. A product in need of sweetening, comprising the composition as defined
in claim 1 in an amount to sweeten said product.

15. The product as defined in claim 14, which is selected from the group
consisting of a food, a beverage, and a medicinal product.

16. The product as defined in claim 14, wherein said product is a cola drink.
17. A method of imparting a sweet taste into a product in need of sweetening, comprising adding the composition as defined in claim 1 to said product in an amount to impart a sweet taste into said product.
- 5
18. A composition, comprising an aspartyl dipeptide ester compound represented by formula (1); or a salt thereof; and at least one compound selected from the group consisting of sugar, sugar alcohol and oligosaccharide, which in an amount sufficient to improve the quality of the sweetness of said aspartyl dipeptide ester compound:



wherein R₁, R₂, R₃, R₄ and R₅ are independently selected from the group consisting of a hydrogen atom, a hydroxyl group, a methoxy group and a methyl group; R₆ and R₇ are independently a hydrogen atom or a methyl group;

15 and when R₆ and R₇ are different substituents, the carbon atom to which these substituents are linked are in the (R), (S) or (RS) configuration.

19. The composition as defined in claim 18, wherein the sweetness intensity

of said aspartyl dipeptide ester derivative is more than 4,000 times that of sucrose.

20. The composition as defined in claim 18, wherein R₃ is a hydroxyl group or a methoxy group; and R₄ and R₅ are hydrogens.

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21. The composition as defined in claim 18, wherein R₁ is a hydroxyl group.

22. The composition as defined in claim 18, wherein R₁ is a hydrogen atom.

10 23. The composition as defined in claim 18, wherein R₂, R₆ and R₇ are hydrogen.

24. The composition as defined in claim 18, wherein R₂ is a hydrogen atom, a hydroxyl group or a methyl group.

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25. The composition as defined in claim 18, wherein the aspartyl dipeptide ester compound is selected from the group consisting of: (1) a compound wherein R₁, R₄, R₅, R₆, and R₇ are hydrogen, R₂ is OH, R₃ is OCH₃; (2) a compound wherein R₁, R₂, R₄, R₅, R₆, and R₇ are hydrogen, , R₃ is OCH₃; (3) a compound wherein R₁, R₄, and R₅, are hydrogen, R₂ is OH, R₃ is OCH₃, R₆ and R₇ are CH₃; (4) a compound wherein R₁, R₄, and R₅ are hydrogen, R₂ is CH₃, R₃ is OH, R₆ and R₇ are CH₃; (5) a compound wherein R₁, R₂, R₄, and R₅ are hydrogen, R₃ is a OCH₃, R₆ and R₇ is CH₃; (6) a compound wherein R₁, R₂, R₄, and R₅ are hydrogen, R₃ is OH, R₆ and R₇ is CH₃; (7) a compound wherein R₁ is OH, R₂, R₄, R₅, R₆ and R₇ are hydrogen, R₃ is a OCH₃; (8) a compound wherein R₁, R₄, R₅, R₆, and R₇ are

hydrogen, R₂ is a CH₃, R₃ is OH; and (9) a compound wherein R₁ and R₃ are OH, R₂, R₄, R₅, R₆ and R₇ are hydrogen.

26. The composition as defined in claim 18, wherein said sugar is one or
5 more sugars selected from the group consisting of a sucrose compound, invert sugar, isomerized sugar, glucose, fructose, lactose, malt sugar, D-xylose and isomerized lactose.

27. The composition as defined in claim 18, wherein said sugar alcohol is one
10 or more sugar alcohols selected from the group consisting of maltitol, sorbitol, mannitol, erythritol, xylitol, lactitol, palatinol, and reduced starch sugar.

28. The composition as defined in claim 18, wherein said oligosaccharide is selected from the group consisting of fructooligosaccharide, maltooligosaccharide,
15 isomalto-oligosaccharide, galactooligosaccharide, soy bean oligosaccharide and lactooligosaccharide.

29. The composition as defined in claim 18, which comprises a sugar and
wherein said sugar is sucrose.

20
30. The composition as defined in claim 29, wherein the sucrose is in an amount of 5 to 95% by sweetness intensity.

31. The composition as defined in claim 18, wherein the sugar, sugar alcohol,
25 or oligosaccharide is present in an amount of from 5 to 95% by sweetness

intensity.

32. The composition as defined in claim 25, wherein the aspartyl dipeptide ester compound is the compound (1) wherein R₁, R₄, R₅, R₆, and R₇ are hydrogen,
5 R₂ is OH, R₃ is OCH₃; and which comprises a sugar, wherein the sugar is sucrose;
and wherein the sucrose is in an amount of from 5 ppm to 850 ppm by weight.
33. The composition as defined in claim 25, wherein the aspartyl dipeptide ester compound is the compound (2) wherein R₁, R₂, R₄, R₅, R₆, and R₇ are
10 hydrogen, R₃ is OCH₃; and which comprises a sugar, wherein the sugar is sucrose;
and wherein the sucrose is in an amount of from 6 ppm to 4000 ppm by weight.
34. The composition as defined in claim 18, which is a sugar alcohol and is at
least one sugar alcohol selected from the group consisting of erythritol, maltitol,
15 sorbitol and xylitol.
35. The composition as defined in claim 34, wherein the sugar alcohol is in
an amount of from 5 to 95% by sweetness intensity.
- 20 36. The sweetener composition as defined in claim 25, wherein the aspartyl dipeptide ester compound is the compound (1) wherein R₁, R₄, R₅, R₆, and R₇ are hydrogen, R₂ is OH, R₃ is OCH₃; and which comprises a sugar alcohol, which is
in an amount of from 1 ppm to 3000 ppm by weight.
- 25 37. The composition as defined in claim 25, wherein the aspartyl dipeptide

ester compound is the compound (2) wherein R₁, R₂, R₄, R₅, R₆, and R₇ are hydrogen, R₃ is OCH₃; and which comprises a sugar alcohol, which is in an amount of from 1 ppm to 1500 ppm by weight.

5 38. The sweetener composition as defined in claim 18, wherein said aspartyl dipeptide ester compound is in an amount of from 0.5 ppm to 5000 ppm by weight.

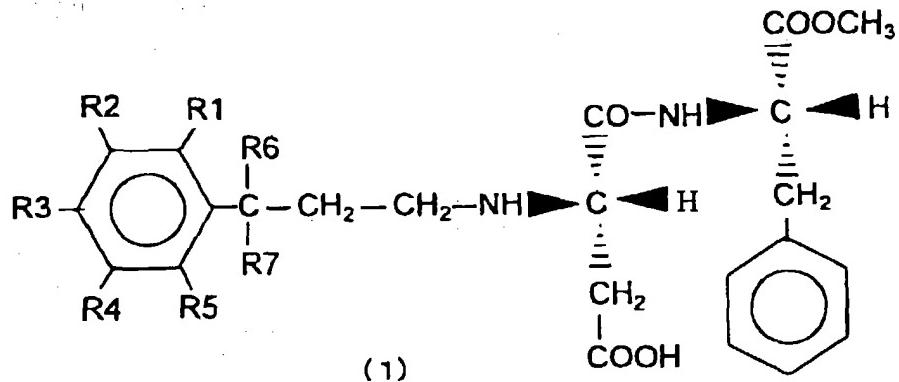
10 39. A product in need of sweetening, comprising the composition as defined in claim 18 in an amount to sweeten said product.

40. The product as defined in claim 39, which is selected from the group consisting of a food, beverage, and a medicinal product.

15 41. The product as defined in claim 39, wherein said product is a cola drink.

42. A method of imparting a sweet taste into a product in need of sweetening, comprising adding the composition as defined in claim 18 to said product in an amount to impart a sweet taste into said product.

20 43. A product, which has a bitter taste, comprising an aspartyl dipeptide ester compound of the formula (1) in an amount to reduce the bitter taste compared to the bitter taste of the product that does not contain the aspartyl dipeptide ester compound:



wherein R₁, R₂, R₃, R₄ and R₅ are independently selected from the group consisting of a hydrogen atom, a hydroxyl group, a methoxy group and a methyl group; R₆ and R₇ are independently a hydrogen atom or a methyl group;

5 and when R₆ and R₇ are different substituents, the carbon atom to which these substituents are linked is in the (R), (S) or (RS) configuration.

44. The product as defined in claim 43, wherein the intensity of sweetness of said aspartyl dipeptide ester compound is more than 4,000 times that of sucrose.

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45. The product as defined in claim 44, wherein R₃ is a hydroxyl group or a methoxy group, and R₄ and R₅ are hydrogens.

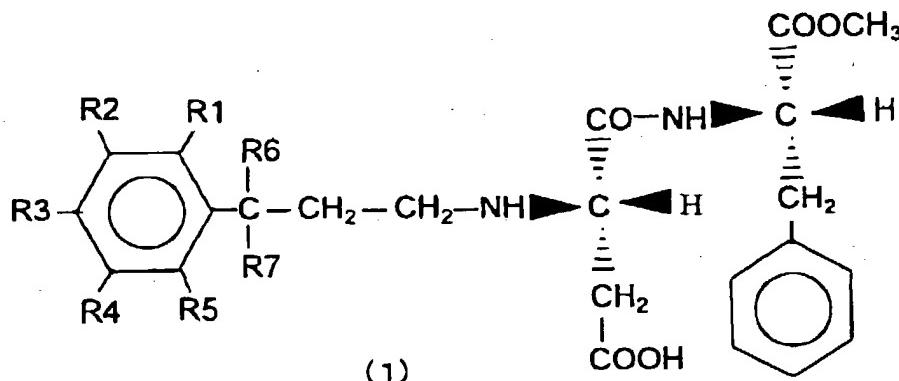
15 46. The product as defined in claim 45, wherein R₁ is a hydroxyl group.

47. The product as defined in claim 45, wherein R₁ is hydrogen.

48. The product as defined in claim 45, wherein R₂, R₆ and R₇ are hydrogens.

49. The product as defined in claim 45, wherein R₂ is a hydrogen, a hydroxyl group or a methyl group.
50. The product as defined in claim 43, wherein the aspartyl dipeptide ester compound is selected from the group consisting of: (1) a compound wherein R₁, R₄, R₅, R₆, and R₇ are hydrogen, R₂ is OH, R₃ is OCH₃; (2) a compound wherein R₁, R₂, R₄, R₅, R₆, and R₇ are hydrogen, R₃ is OCH₃; (3) a compound wherein R₁, R₄, and R₅, are hydrogen, R₂ is OH, R₃ is OCH₃, R₆ and R₇ are CH₃; (4) a compound wherein R₁, R₄, and R₅ are hydrogen, R₂ is CH₃, R₃ is OH, R₆ and R₇ are CH₃; (5) a compound wherein R₁, R₂, R₄, and R₅ are hydrogen, R₃ is a OCH₃, R₆ and R₇ is CH₃; (6) a compound wherein R₁, R₂, R₄, and R₅ are hydrogen, R₃ is OH, R₆ and R₇ is CH₃; (7) a compound wherein R₁ is OH, R₂, R₄, R₅, R₆ and R₇ are hydrogen, R₃ is a OCH₃; (8) a compound wherein R₁, R₄, R₅, R₆, and R₇ are hydrogen, R₂ is a CH₃, R₃ is OH; and (9) a compound wherein R₁ and R₃ are OH, R₂, R₄, R₅, R₆ and R₇ are hydrogen.
51. The product as defined in claim 43, which is a food, a beverage, or a medicine.
52. The product as defined in claim 43, wherein the bitter taste is imparted on the product by one or more compounds selected from the group consisting of an amino acid, a peptide, quinine, caffeine and a mineral.
53. The product as defined in claim 51, wherein the aspartyl dipeptide ester compound is in an amount of from 0.2 ppm to 10000 ppm by weight.

54. The product as defined in claim 47, which is a liquid product.
55. A method of correcting the taste of a product, comprising adding a
5 aspartyl dipeptide ester of formula (1) to said product, in an amount sufficient to
correct the taste of the product:



wherein R₁, R₂, R₃, R₄ and R₅ are independently selected from the group
consisting of a hydrogen atom, a hydroxyl group, a methoxy group and a methyl
10 group; R₆ and R₇ are independently a hydrogen atom or a methyl group;
and when R₆ and R₇ are different substituents, the carbon atom to which these
substituents are linked is in the (R), (S) or (RS) configuration.

56. The method as defined in claim 55, wherein said corrected taste is a bitter
15 taste.